

POZVÁNKA

na seminář oddělení 15 Fyzikálního ústavu AV ČR, v.v.i.

Seminář se koná

v pondělí 24. května 2010 v 16:00

v zasedací místnosti budovy A (1. patro vedle knihovny)
Fyzikálního ústavu, Cukrovarnická 10, Praha 6.

Na programu je přednáška

Anomalous Hall conductivity: local orbitals approach

kterou prosloví

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Abstrakt

A theory of the anomalous Hall conductivity based on the properties of single site orbitals is presented. Effect of the finite electron life time is modeled by energy fluctuations of atomic-like orbitals. Transition from the ideal Bloch system for which the conductivity is determined by the Berry phase curvatures to the case of strong disorder for which the conductivity becomes dependent on the relaxation time is analyzed. Presented tight-binding model gives by the unified way experimentally observed qualitative features of the anomalous conductivity in the so called good metal regime and that called as bad metal or hopping regime.